Worms Help Agra to Clean-up Its Act

The management of a city's waste is essential to ensure health and sanitation and a better quality of life. Most cities in India are unable to manage their waste and keep streets clean due to outdated and inefficient systems, institutional weaknesses, lack of resources, a low degree public awareness and insufficient planning. Agra, home to the world famous Taj Mahal, faces many of these difficulties.

Photo Credit: USAID Clean Technology Initiative

USAID's Clean Technology Initiative, which tackles environmental issues facing the area around the Taj -- the Taj Trapezium Zone, is bringing the concepts of "door-to-door" collection and waste segregation to residents of Agra. In partnership with city officials and the Citizens Council of Agra, USAID set-up a pilot compost plant to show how segregated organic waste can be used to produce valuable compost using earthworms.

The effort covered two residential areas in the city and was launched with a door-to-door awareness campaign led by school children who also distributed pamphlets. Several other residential areas soon also agreed to participate. After door-to-door collection by specially designed tricycles, the waste was transported to a disposal site by motorized three-wheelers. The daily collection was tilled every seven days for proper aeration and heat dissemination in preparation for the earthworms. After day number twenty-one, the worms were brought into action.

The compost collected from the vermi-pits is rich in manure for plants. After collection it is sieved, weighed and bagged and used in parks and kitchen gardens as well as for commercial sale. The composting plant has since been visited by both Indian and international representatives. An analysis of the cost benefit shows that the initiative is financially viable at a small-scale but returns increase with project expansion. City officials are now working on replicating the effort in other parts of the city.

Photo Credit: USAID Clean Technology Initiative